MISCELLANEA*

KURLOFF BODIES IN FISH

In a specimen of *Diodon hystrex* examined at Freetown, Sierra Leone, Kurloff bodies were found in about 70 per cent. of the lymphocytes. As many as five Kurloff bodies were present in some cells.

S. ADLER and E. J. CLARKE.

TRICHONEMA TETRACANTHUM (MEHLIS, 1831, OF LOOSS, 1900)

This worm was found by us in June, 1923, in a donkey born and bred in the north of Ireland. This record is of interest, as the parasite has not been found since it was described by Looss in 1900. The fact that it had not been observed in Europe is used by Railliet (1923) as an argument that Looss' parasite is not identical with *Strongylus tetracanthus*, Mehlis, 1831.

J. W. S. MACFIE and WARRINGTON YORKE.

PIGS AND *ANKYLOSTOMIASIS* IN THE GOLD COAST

During January and February, 1922, forty-eight pigs were examined at the Accra slaughter-house for hookworms, but neither *Ancylostoma duodenale* nor *Necator americanus* were found, although 3,270 other small nematodes were collected, the majority of them being *Oesophagostomum dentatum* (Rud., 1803), and a few

* It is proposed to publish under this heading short records relating to Tropical Medicine and Parasitology.

Arduenna strongylina (Rud., 1819) and *Characostomum longemucronatum* (Molin, 1861). Subsequently specimens obtained from pigs at Cape Coast, at Kumasi, and at Sekondi (Dr. J. F. Corson) were examined, and in these also neither *A. duodenale* nor *N. americanus* was found. These results do not, therefore, support the view that pigs are an important factor in the dissemination of hookworm infections in the Gold Coast.

J. W. S. Macfie.

ONCHOCERCA ARMILLATA IN CATTLE IN THE GOLD COAST

Commes and Devanelle (1917) record that in Upper Senegal and Niger, *Onchocerca armillata*, Railliet and Henry, 1909, is a common parasite of cattle, and that they found it in one hundred and fifty-one animals out of one hundred and ninety-eight, that is in 76·3 per cent. It is also a common parasite of cattle in the Gold Coast, particularly of the hump-backed breed, as is shown by the fact that of forty animals examined at Accra during September and October, 1922, namely, sixteen hump-backed cattle and twenty-four of the straight-backed breed, fourteen, equal to 87·5 per cent., of the former, and seven, equal to 29·2 per cent., of the latter, were infected.

The situations in which the worms were found and the lesions (atheroma, calcification, cyst and nodule formation, etc.) associated with them were similar in the Gold Coast cases to those described by Commes and Devanelle, and need not be referred to in detail. Some of the nodules contained, in addition to a mass of fibrous material and portions of parent worm, a number of free larvae. The larvae resembled in general form those of *O. volvulus*, length of the few measured 280μ to 345μ, breadth about 5μ, anterior end rounded, nerve ring well marked and situated at about 25 per cent. of the length from the anterior extremity, and tail sharply pointed.

In three infected animals, the blood (10 c.c. or more) was examined for larvae, but without success. In this connection it may be recalled that in blood films from one hundred and sixty-six cattle examined at Accra in 1914, filarial embryos were found in five,

that all these were sheathed and were perhaps embryos of *Setaria labiato-papillosa*, a species which has been found in cattle at Accra (Macfie, 1915), but that no larvae resembling those of *O. armillata* were encountered. The skin of these three animals was also examined, because it was thought that, as in the case of *O. volvulus*, larvae might be present in it. No larvae were found, but it must be admitted that considerable difficulty was experienced owing to the thickness, density, and hairiness of the skin, and that consequently the examination was not a very satisfactory one.

J. W. S. Macfie.

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